SOKOLOV, V.N.; TOLMACHEVA, L.I.

Eliminating inefficiency in the delivery of alcoholic beverages to Moscow Province. Spirt. prom. 27 no.6:33-34 '61.   (MIRA 14:9)
(Moscow Province--Liquor industry)

TOLMACHEVA, L.I.

Petrovskaya Alcohol Combine changed over to the 7-hour workday.
Spirt.prom. 26 no.6:35-38 '60.   (MIRA 13:11)
          (Petrovskaya (Ivanovo Province)--Alcohol)

UL'YANOVA, M.P.; TOLMACHEVA, L.I.; MOLOSTVOV, Ye.V.

Change-over to the 7-hour workday. Spirt.prom. 26
no.5:33-38 '60.   (MIRA 13:7)
     (Distilling industries) (Hours of labor)

MOROZOV, M.P.; TOLMACHEVA, L.I.

New wage-scale qualification handbook for enterprises of the alcohol, and liqueur and vodka industry. Spirt. prom. 25 no.7:48 '59.
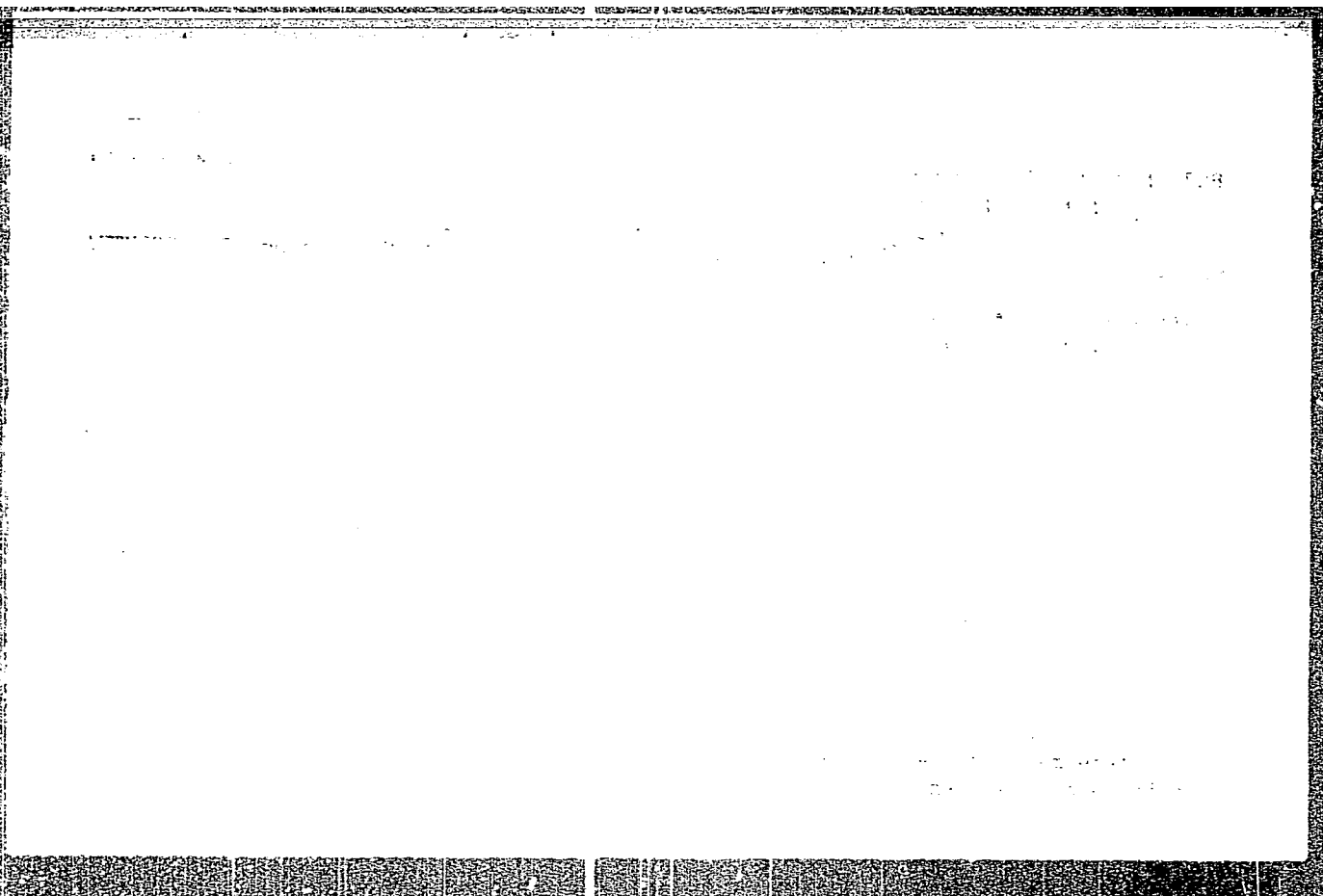
(MIRA 13:2)

(Liquor industry)

PEROV, Ye.V.; TOLMACHEVA, L.P.; GORDEYEVA, N.N.

Solubility of calcium nitrate in nitric acid. Zhur. prikl. khim.
33 no.9:2140-2141 S '60.   (MIRA 13:10)
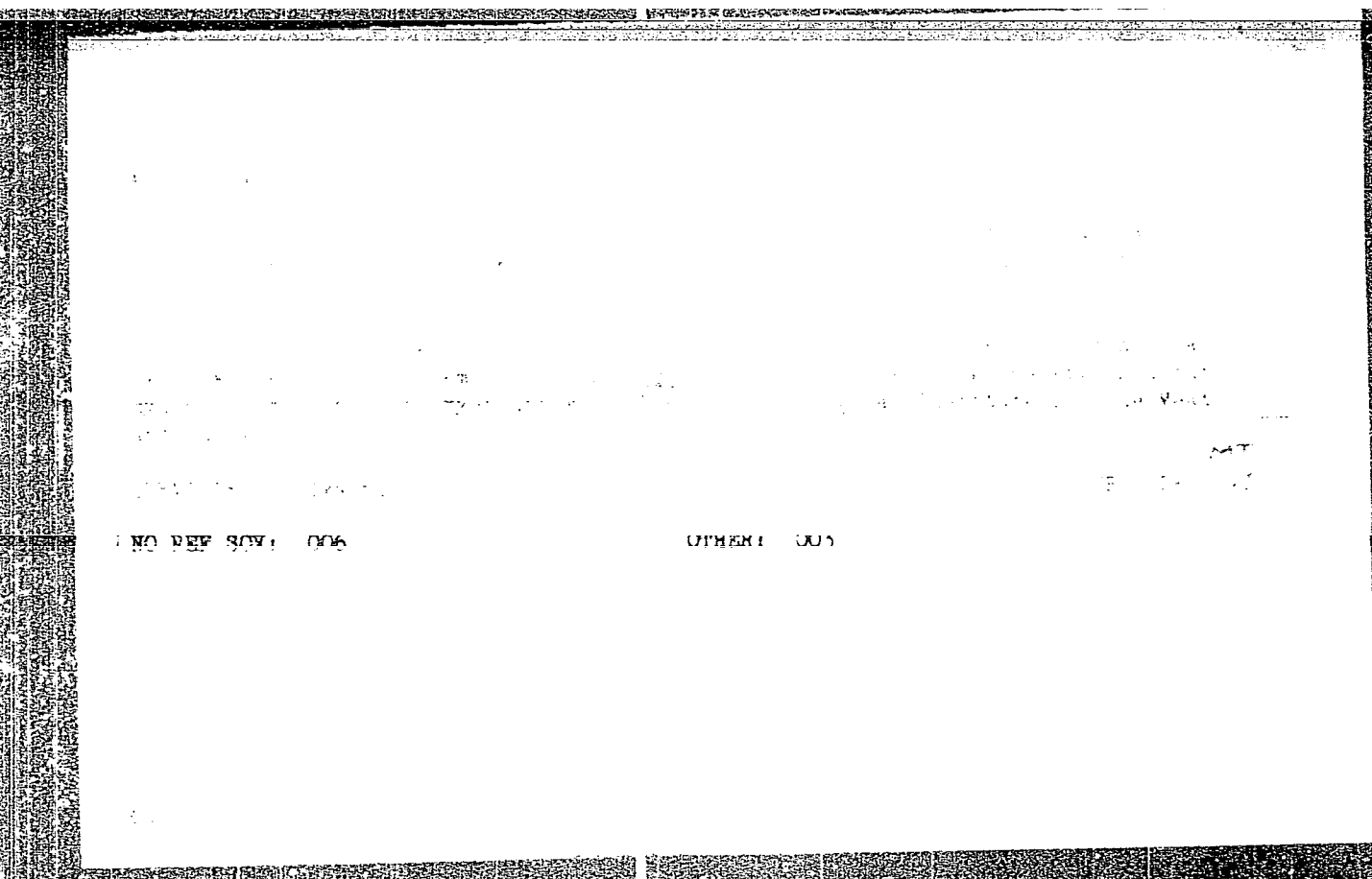   (Calcium nitrate)

NO REF SOY: 006   OTHER: 003

TOLMACHEVA, M.N.

Our experience with lamellar resection of the sclera in retinal
detachment.   Vest. oft. 74 no.2:47-51 '61.   (MIRA 14:4)
(RETINA—SURGERY)

TOLMACHEVA, M.N.; GUL', V.Ye.; DOGADKIN, B.A.

Mechanical properties of carbon-black stock at low temperatures.
Part 1: Strength characteristics of carbon black-extended uncured
rubber. Koll. zhur. 27 no.4:524-528 Jl-Ag '65.
(MIRA 18:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova i Moskovskiy tekhnologicheskiy institut myasnoy
i molochnoy promyshlennosti. Submitted March 24, 1964.

L 14168-66   EWF(j)/EWT(m)/T   RM/WW

ACC NR: AP6003941   SOURCE CODE: UR/0374/65/000/005/0071/0077

AUTHOR: Rayevskiy, V. G. (Moscow); Tolmacheva, M. N. (Moscow);
Makarskaya, L. V. (Moscow)

ORG: none

TITLE: Effect of physical state on the tear of amorphous polymers

SOURCE: Mekhanika polimerov, no. 5, 1965, 71-77

TOPIC TAGS: polymer, amorphous polymer, copolymer, deformation rate,
temperature characteristic, temperature dependence, rupture strength

ABSTRACT: The temperature dependence of the basic deformation charac-
teristics and breaking point of the SKS-85 copolymer at tear in the
interval of $T < T_{gt}$ to $T > T_t$ has been investigated. It was determined
that the total work of rupture of the polymer in the glass state is
determined by the work of elongation. The total work of rupture of the
polymer in the high elastic state is basically determined by the work
of formation of tear surface. Orig. art. has: 5 figures. [Based on
author's abstract].

SUB CODE: 11,07/SUBM DATE: 25Jan65/   ORIG REF: 005/   OTH REF: 002

Card   1/1   UDC: 678:539:4.019.1

L 14845-66   EWT(m)/EWP(j)/T/ETC(m)-6   WW/RM

ACC NR: AP6005828   (A)   SOURCE CODE: UR/0374/65/000/006/0098/0162

AUTHOR: Rayevskiy, V. G. (Moscow); Tolmacheva, M. N. (Moscow);
Makarskaya, L. V. (Moscow)

ORG: none

7

B

TITLE: Effect of physical state on the tear of filled systems based on
linear amorphous polymers

SOURCE: Mekhanika polimerov, no. 6, 1965, 98-102

TOPIC TAGS: amorphous polymer, black copolymer, linear polymer, filler,
polymer structure, rupture strength, temperature dependence, mechanical
stress, thermal expansion, heat effect, material deformation

ABSTRACT: The effect of temperature within the range $T > T_T$ to $T < T_g$
on deformation, rupture, and rupture rate of the SKS-85 copolymer with
channel black as a filler has been investigated. It was shown that the
nature of curves describing the respective dependence does not differ
from that obtained in tests of the SKS-85 unfilled copolymer. It was
found that the introduction of black and chalk fillers increased the
rupture strength of the polymer while in the high elastic state and de-
creased it while in the glass state. It is believed that the incapa-
bility of conventional fillers to reinforce polymers in the glass state

Card 1/2   UDC: 678:539.4.019.1

L 14845-66

ACC NR: AP6005828

is a natural phenomenon. It is further assumed that the reversion of
the reinforcement effect during transition from high elastic state to
the glass state is caused by a sharp drop in adhesive strength joining
the polymer and filler which occurs during the cooling of the samples
from $T > T_T$ to $T < T_g$. This reduction in adhesive strength is due to
shrinkage stress concentration in the contact zone as a result of the
difference in thermal expansion coefficients of the polymer phase and
of the filler. Orig. art. has: 6 figures. [Based on author's abstract]

SUB CODE: 07,11,20/SUBM DATE: 15Mar65/ ORIG REF: 004

Card 2/2 mc

PANTIYELEV, Ya., kand. sel'skokhoz. nauk; TOLMACHEVA, N.

On the labor front. Zashch. rast. ot vred. i bol. 10 no.12:
3-5 '65.   (MIRA 19:1)

1. Zamestitel' nachal'nika Lyuberetskogo upravleniya sel'skogo
khozyaystva, Moskovskaya oblast' (for Pantiyelev). 2. Glavnyy
agronom po zashchite rasteniy Lyuberetskogo upravleniya sel'skogo
khozyaystva, Moskovskaya oblast' (for Tolmacheva).

KUZNETSOV, Yu.A.; MAKAROV, A.A.; MELENT'YEV, L.A.; MERENKOV,
        A.P.; NEKRASOV, A.S.; TSVETKOV, N.I.; KUZNETSOV, Yu.A.;
        MAKAROVA, A.S.; KARPOV, V.G.; MANSUROV, Yu.V.; SYROV,
        Yu.P.; KHRILEV, L.S.; TSVETKOVA, L.A.; VOYTSEKHOVSKAYA,
        G.V.; YEFIMOV, N.T.; LEVENTAL', G.B.; KHANAYEV, V.A.;
        BELYAYEV, L.S.; GAMM, A.Z.; KARTELEV, B.G.; KRUMM, L.A.;
        LIOPO, T.N.; SVIRKUNOV, N.N.; DRUZHININ, I.P.;
        KONOVALENKO, Z.P.; KHAM'YANOVA, N.V.; SHVARTSBERG, A.I.;
        NIKONOV, A.P.; STARIKOV, L.A.; POPYRIN, L.S.; PSHENICHNOV,
        N.N.; TROSHINA, G.M.; CHEL'TSOV, M.B.; SVETLOV, K.S.;
        SUMAROKOV, S.V.; TAKAYSHVILI, M.K.; TOLMACHEVA, N.I.;
        KHASILEV, V.Ya.; KOSHELEV, A.A.; KUDINOVA, L.I., red.

[Methods for using electronic computers in the optimiza-
tion of power engineering calculations] Metody primeneniia
elektronno-vychislitel'nykh mashin pri optimizatsii energe-
ticheskikh raschetov. Moskva, Nauka, 1964. 318 p.
                                        (MIRA 17:11)
1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Energetiche-
skiy institut. 2. Chlen-korrespondent AN SSSR (for Melent'yev).

DILENDIK, N.N., kand.sel'skokhoz.nauk; SAVCHENKO, agronom po zashchite
rasteniy; MEZIN, A.F.; TOLMACHEVA, N.P., agronom po zashchite
rasteniy (Moskovskaya obl.)

Letters to the editor. Zashch. rast. ot vred. i bol. 6 no.4:12
Ap '61.   (MIRA 15:6)

1. Belorusskiy nauchno-issledovatel'skiy institut lesnogo
khozyaystva, g. Gomel' (for Dilendik).
                    (Plants, Protection of)

TOLMACHEVA

Practices of the unit of the Bronnitsy Repair and Supply Station.
Zashch.rast.ot vred.i bol. 4 no.4:6-7 Jl-Ag '59.

1. Nachal'nik otryada po bor'bes vreditelyami i boleznyami rasteniy
Bronnitskoy rayonnoy traktornoy stantsii.

(MIRA 16:5)

(Bronnitsy District-Spraying and dusting in agriculture)

TOLMACHEVA, N.S.

Desensitizing action of mepazine.Farmakol. toksik. 26 no.3:
291-297   My-Je'63
                                                    (MIRA 17:2)

1. Otdel khimioterapii (zav. - prof. A.M.Chernukh) Instituta
farmakologii i khimioterapii AMN SSSR.

CHERNUKH, A.M.} TOLMACHEVA, N.S.

On the effect of aminazine on the course of experimental pneumococcal infection and shwartzman phenomenon. Zhur. mikrobiol. epid. i immun. 31 no. 5:53-57 My '60.

(MIRA 13:10)

1. Iz Instituta farmakologii i khimioterapii AMN SSSR.
   (CHLORPROMAZINE)   (ALLERGY)   (PNEUMOCOCCAL INFECTIONS)

ALEKSANDROV, P.N.; TOLMACHEVA, N.S,; YUSHCHENKO, N.A.

Effect of temperature factors on the concentration of tetra-
cycline in the blood and organs of white rats. Antibiotiki 7
no.10:888-891   0'62

(MIRA 16:12)

1. Otdel khimioterapii (zav. - prof. A.M.Chernukh) Institute
farmakologii i khimioterapii AMN SSSR.

VOYTOVETSKIY, V.K.; TOLMACHEVA, N.S.

Scintillating glasses with an increased light yield for the
detection of neutrons. Atom.energ. 10 no.5:504 My '61.

(Neutrons)   (Scintillation counters)   (MIRA 14:5)

26.2263

22879
S/089/61/010/005/007/015
B102/B214

AUTHORS: Voytovetskiy, V. K., Tolmacheva, N. S.

TITLE: Scintillation glasses with increased light yield for neutron
           detection

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 504

TEXT: It is known that the light yield of cerium activated luminescence
glasses increases with the Ce(III) content. However, if such a glass is
made in a neutral medium the Ce(IV) predominates leading to a coloring of
the glass. The lithium silicate glasses with 0.01-0.015 cerium content
were found to be optimal, for the effect of Ce(IV) became marked at higher
cerium content. It could now be shown that if the glass is made in a
reducing medium relatively large quantities of the activator can be kept
in trivalent state; that is it was possible to increase the cerium content
up to 0.1 without the appearance of color. The present "Letter to the
Editor" is a report of these experiments. The glasses were made of
especially pure materials (the Fe_2O_3 content was $< 10^{-3}$ %); the graphite
powder mixture was added for reduction. The mass was heated in alundum

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Scintillation glasses with increased...   S/089/61/010/005/007/015
                                                  B102/B214

crucibles in the silicon carbide furnace at 1250-1270°C. In the course of
one hour the temperature was increased to 1370-1400°C and melting was
continued till glass was formed. For some compositions a temperature
increase to 1460°C for a short time was necessary. Then the mass was
pressed in cold forms so that disks 3.5-4 cm in diameter were obtained.
These glasses were subjected to a thermal treatment at 500°C in a muffle
furnace. The scintillation efficiency of thin $Li_2O \cdot 3SiO_2 \cdot 0.08Al_2O_3$ glasses
remained unchanged for cerium concentrations of 0.05-0.1 and amounted to
8-9 % (on excitation by electrons) of the scintillation efficiency of
NaI(Tl) crystals. For glasses of 1 cm thickness the optimal content of
cerium was 0.05-0.06. On scintillation excitation by the reaction products
of thermal neutrons with Li^6 of $Li_2O \cdot 3SiO_2 \cdot 0.08Al_2O_3 \cdot 0.1CeO_2$ glasses in
scintillation counters a half width of the peak of 22.5 % was reached. A
further increase of the scintillation efficiency can be obtained with more
complicated compositions of the glasses, as, for example, 11 % of
$Li_2O \cdot 0.5CaO \cdot 4SiO_2 \cdot 0.13Al_2O_3 \cdot 0.1CeO_2$. With increasing thickness of the
glass the optimal content of cerium decreases and approaches the value

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22879

Scintillation glasses with increased...

S/089/61/010/005/007/015
B102/B214

0.06. Finally the authors report on the results of Ref. 4 (on boron glasses in scintillation neutron detectors). There are 1 figure and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ref. 4: L. Bollinger, G. Thomas, R. Ginther. Rev. Scient. Instrum. 30, 1135 (1959).

SUBMITTED: August 1, 1960

Card 3/3

TOLMACHEVA, N. S.

AID

Experimental study of the pharmacologic properties of native streptomycin. I. Strong/toxicity of streptomycin. R. A. Veis and N. S. Tolmacheva. Trudy Akad. Med. Nauk S.S.S.R., Antibiotiki i ikh Primenenie 22, No. 1, 50-5(1952).—The cryst. HCl-CaCl₂ double salt of native streptomycin is superior to similar imported samples. The toxicity and hypotensive effect depend upon the purity of the drug. The purer the drug the smaller its toxicity and the larger the dose which causes a minimal hypotensive effect. II. Neurotoxic effect of streptomycin. R. A. Veis. Ibid. 55-8.—Spinal injection of 1000 units/kg. into dogs is without effect while a similar dose of the imported drug causes depression and sometimes vomiting.

A. S. Mirkin

TOLMACHEVA, N.S.

The pharmacology of biomycin. R. A. Veis, E. K. Berezin, and N. S. Tolmacheva. *Biomitsin*. (Moscow, Medgiz) 1954, 10-23; *Referat. Zhur., Khim., Biel. Khim.*, 1955, No 2751 — The av. L.D. of biomycin (I) for mice is 100 mg./kg. administered intravenously. Daily administration of I perorally for 20 days in doses exceeding the therapeutic had no effect on the growth of the mice. It did shorten the blood-clotting time. The intravenous administration of I to cats in doses of 100 mg./kg. and at the rate of 10 mg./kg./min. produced no significant respiratory or blood-pressure changes. Increased peristaltic movement was observed in cats and rabbits following peroral administration of the drug. Irritation spots were observed at the points of subcutaneous or intramuscular injection. I possesses no pyrogenic properties. A therapeutic concn. of I is obtained in the blood soon after peroral administration and lasts 48 hrs. The greater part of I is eliminated *via* the urine. It was found in the liver, kidneys, gall bladder, tissues, and spinal cord.

B. S. Levine

(2)

TOLMACHEVA, N. S., VEYS, R. A. and BEREZINA, Ye. K.

"Material on the Pharmacology of biomycin," appears in TABCON of "Biomycin (Experimental Study and Clinical use of Biomycin," edited by A. F. Bilibin, Moscow 1954.

SO: Translation-417, Jun 21, 1955.

21(4)

AUTHORS: Voytovetskiy, V. K., Tolmacheva, N. S., Arsayev, M. I.

SOV/89-6-3-11/29

TITLE: A Scintillating Glass for Detecting Slow Neutrons (Stsintill-yatsionnoye steklo dlya detektirovaniya medlennykh neytronov)

ABSTRACT: The composition and the activator of a scintillating glass must be chosen in such a way that their spectra are within the range of maximum sensitivity of the photomultiplier and do not intersect with the absorption spectrum. A series of glass types was produced ($Li_2O.SiO_2$, $Li_2O.2SiO_2$, $1/2$ $Li_2O.$ $1/2$ $Na_2O.2SiO_2$, $1/2$ $Li_2O.$ $1/2$ $K_2O.2SiO_2$, $1/2$ $Li_2O.$ $1/2Rb_2O.2SiO_2$, $Li_2O-CaO.2SiO_2$) which were activated with Ce. Glass of the type $Li_2O.2SiO_2$ proved to be the most convenient if it was activated with 2 mol-% Ce. The glasses were produced in the following way: carbonic acid salts of Li, Ca, Na, K, Rb, and SiO_2 were mixed at certain weight proportions and a titrated solution of trivalent Ce($CeCl_3$) was added to

Card 1/3

A Scintillating Glass for Detecting Slow Neutrons

this mixture. Furthermore, distilled water was added to this mixture until a viscous mass formed which was triturated in a porcelain crucible during one hour. Then the mass was dried at 100°C and annealed for 20 min at 800°C. The production of the enamel which followed was made in a corundum container at a temperature of from 1250-1300°C. After about 2-3 hours the enamel had become transparent. It was poured into a cold metallic mold and the disk-shaped pieces of glass thus produced were after-treated in a muffle furnace heated to 500°C during 30 minutes. The scintillating efficiency of the types of glass - due to electron excitation - was measured by a comparison with the scintillating efficiency of a NaJ(Tl) crystal in a scintillation-Compton spectrometer. In this connection the efficiency of the glass is 1.4% of the NaJ(Tl)-crystal. The ratio between the scintillation yields of electrons and α-particles was measured 3.8 - 4. Luminescence of a scintillation flash is about 0.15 μsec. If the glass has a thickness of 1 mm and contains lithium enriched with Li^6 to 90.5% it has an efficiency of 82% for thermal neutrons. If the glass is 5 mm thick its efficiency

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A·Scintillating Glass for Detecting Slow Neutrons   SOV/89-6-3-11/29

decreases to 40% in the detection of 10 ev-neutrons. The
sensitivity of glass to fast neutrons is low and attains an
optimum efficiency of 0.05% at a thickness of 1 mm of the
glass. Z. M. Karpova assisted in the production of the glass
samples. There are 9 figures, 1 table, and 11 references,
5 of which are Soviet.

SUBMITTED: October 25, 1958

Card 3/3

21(1), 21(8)   SOV/89-6-4-13/27

AUTHORS: Voytovetskiy, V. K.,   Tolmacheva, N. S.

TITLE: Lithium Silicate Scintillation Glasses for the Detection of
                Slow Neutrons (Litiy-silikatnyye stsintillyatsionnyye stekla
                dlya detektirovaniya medlennykh neytronov)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 4, pp 472-474 (USSR)

ABSTRACT: From the results obtained by the previous paper (Ref 1) it
                was to be expected that by an increase of the acid component
                in the $Li_2O_3 \cdot SiO_2$(Ce)-glasses their scintillation sensitivity
                in wide ranges could be increased. It was found that in the
                case of a high silicon oxide content the lithium-silicate
                compounds in the glass-forming state are not stable
                ($LiO_2 \cdot 3SiO_2$(Ce) already opalesces). The addition of other
                glass-forming substances such as phosphorus or boron causes
                no increase of the light yield. In glass of the type $LiO_2 \cdot 3SiO_2$,
                additions of Al_2O_3 in different quantities were tried out.
                At a 0.08 M Al_2O_3 concentration a maximum scintillation effect
                is observed (the yield curves are given). For a glass of the
Card 1/2   type $Li_2O \cdot 3SiO_2 \cdot 0.08 Al_2O_3$(Ce) having a thickness of 0.2 cm

SOV/89-6-4-13/27

Lithium Silicate Scintillation Glasses for the Detection of Slow Neutrons

the scintillation efficiency is higher by 3% than in the case of a NaJ(Tl)-crystal. Ce-concentration was varied within a range of from 0.01 to 1.015 CeO_2. The dependence of the degree of efficiency of scintillation of the thickness of the glass shows that the increase of the SiO_2-content leads to the production of opaque glasses, whereas an addition of aluminum oxide increases not only the light yield but also the degree of transparence. By means of the scintillator $LiO_2 \cdot 3SiO_2 \cdot 0.08\,Al_2O_3$ (Ce) (in connection with the multiplier FEU-S) the differential-amplitude spectrum of a Po+Be-neutron source was recorded. A similar recording was made for a neutron beam emitted from a reactor, in which case the lithium in the scintillator consisted of 90.5% Li^6. The efficiency of this glass with respect to a thermal neutron flux inciding vertically upon the scintillator attains an amount of 90%. There are 5 figures and 2 Soviet references.

SUBMITTED: September 20, 1958

Card 2/2

S/016/60/000/05/16/079

AUTHORS: Chernukh, A.M., and Tolmacheva, N.S.

TITLE: The Effects of Aminazin on the Course of Experimental Pneumococcal
              Infection and the Schwartzmann Phenomenon

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960,
              No. 5, pp. 53 - 57

TEXT: The effects of aminazin on infectious aseptic and allergic in-
flammations were studied by injecting aminazin intramuscularly into rabbits,
previously infected with Pneumococcus Type 1. Aminazin aggravated the clinical
course of the illness and increased the mortality rate from the pneumococcal
infection. However, aminazin had no effect on the pneumococcal process in white
mice. Aminazin inhibited the first stage of the aseptic inflammatory reaction in
rats, but in the later stage the disease turned chronic. An injection of 20 mg
of aminazin per kg of body weight led to a much weaker Schwartzmann phenomenon
than in the control animals. After 40 mg/kg the Schwartzmann phenomenon could
not be detected macroscopically. The probable reason is that aminazin inhibits

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The Effects of Aminazin on the Course of Experimental Pneumococcal Infection and the Schwartzmann Phenomenon.

S/016/60/000/05/16/079

the changes in the vascular permeability which are characteristic of the inflammatory process. There are 4 tables and 11 references, 4 of which are Soviet, 1 English, 4 German, and 2 French.

ASSOCIATION: Institut farmakologii i khimioterapii AMN SSSR (Institute of Pharmacology and Chemiotherapy of the AMN, USSR)

SUBMITTED: July 1, 1959

Card 2/2

BRODSKIY, A.Ya., kand.tekkhn.nauk; TOLMACHEVA, N.V., inzh.

Weldability of low-alloy 15 GS manganese steel. Prom. stroi.
40 no.3:47-54 '62.   (MIRA 15:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh
konstruktsiy Akademii stroitel'stva i arkhitektury SSSR.
            (Manganese steel) (Welding research)

L 9653-66   EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)   MJW/JD

ACC NR: AP5027602

SOURCE CODE: UR/0135/65/000/011/0022/0024

AUTHOR: Tolmacheva, N. V. (Engineer); Brodskiy, A. Ya. (Candidate of technical sciences)

ORG: TsNIISK im. V. A. Kucherenko

TITLE: Weldability of thermally hardened 10G2S low-alloy steel

SOURCE: Svarochnoye proizvodstvo, no. 11, 1965, 22-24

TOPIC TAGS: weldability, steel, metal hardening, material fracture, metal aging, impact strength / 10G2S steel

ABSTRACT: The results of a study of the weldability of 10G2S low-alloy steel
(0.1% C, 1.3-1.43% Mn, 1.0% Si, 0.023% S, 0.022-0.024% P, 0.12% Cu, 0.05-0.08% Cr,
0.06-0.08% Ni) are presented. The steel was first rolled into 12, 20 and 30 mm thick
sheets and heat-treated (water quenching from 910-900°C with subsequent high-tempe-
rature tempering). Owing to thermal hardening, the ultimate strength of the steel
was increased by 6%; yield point, by 20%; and impact strength, by 34-57%; and the
critical temperature of cold brittleness dropped below - 60°C; in addition, proneness
to aging decreased. The following factors of the steel's weldability were investi-
gated: optimal linear energy of the welding arc, proneness of workhardened steel to
aging in the zone of thermal influence, local variations of yield point and impact

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UDC: 621.791.011:669.15-194

L 9653-66

ACC NR: AP5027602

toughness in the zone of thermal influence in the butt-welded joint, and the prone-
ness of steel in the zone of thermal influence to brittle fracture in the presence
of natural and artificial stress concentrators. The welding and testing procedure is
described in previous articles by the same authors (Brodskiy, A. Ya., Tolmacheva,
N. V. In coll: Issledovaniya po metallicheskim konstruktsiyam, Gosstroyizdat, 1961;
and Issledovaniya po stal'nym konstruktsiyam, Gosstroyizdat, 1962). The overall weld-
ability of the steel was determined by comparing the test results for the weldments
with the results of analogous tests for the base metal (in thermally hardened and
hot-rolled state) as well as with official standards. Findings: the optimal linear
energy of the welding arc for this steel is 5-10 kcal/cm. If the cooling rate of the
near-weld zone is 4-18°C/sec, the steel's mechanical indicators (impact strength and
yield limit) remain acceptable. Resistance to aging and to brittle fracture in the
presence of natural and artificial strength concentrators is markedly higher for
thermally hardened 10G2S steel than for hot-rolled steel of the same kind. E55A-type
electrodes may be recommended for the welding of thermally hardened 10G2S steel. Orig.
art. has: 4 figures, 2 tables.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001

Card   2/2

BRODSKIY, A.Ya., kand.tekhn.nauk; TOLMACHEVA, N.V., inzh.

Weldability of thermally hardened St.3kp steel. Svar.proizv.
no.12:11-15 D '64.   (MIRA 18:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh
konstruktsiy im. V.A.Kucherenko Gosstroya SSSR.

BRODSKIY, A.Ya., kand.tekhn.nauk; TOLMACHEVA, N.V., inzh.

Investigating the weldability of nickel-free 14G2, 14KhGS, and 15GS low-alloy steel. Trudy TSNIISK no.4:134-210 (MIRA 15:2)

(Steel alloys—Welding)

BRODSKIY, A.Ya., kand.tekhn.nauk; TOLMACHEVA, N.V., inzh.

    Grade 15GS low-alloy silicon-manganese steel for welded
structural elements. Trudy TSNIISK no.13:232-247
'62.
                                 (MIRA 15:11)
             (Steel, Structural--Testing)

BRODSKIY, A.Ya., kand.tekhn.nauk; TOLMACHEVA, N.V., insh.

Automatic welding under flux of insertion pieces for sectional
reinforced concrete constructions. Svar.proizv. no.11:28-31 N
'62.
(MIRA 15:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh
konstruktsiy Akademii stroitel'stva i akrhitektury SSSR.
(Concrete reinforcement--Welding)

BRODSKIY, A.Ye.; TOLMACHEVA, N.V.; ROMVARI, P.

    Softening of heat-treated structural steel. Metalloved. i
    term. obr. met. no.8:47-49 Ag '64.   (MIRA 17:10)

    1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh
    konstruktsiy i Budapeshtskiy politekhnicheskiy institut.

ORLOV, V.; AGAFONOVA, Z.; GUDAKOVA, V., starshiy nauchnyy sotrudnik; TOLMACHEVA, O., starshiy nauchnyy sotrudnik

Timely disinfection of seed. Zashch. rast. ot vred. i bol. 10 no.1:15-17 '65.

(MIRA 18:3)

1. Direktor Kurskoy sel'skokhozyaystvennoy opytnoy stantsii (for Orlov). 2. Zaveduyushchaya laboratoriyey Kurskoy sel'skokhozyaystvennoy opytnoy stantsii (for Agafonova). 3. Kurskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Gudakova, Tolmacheva).

L 19324-63   EWP(q)/EWT(m)/BDS   AFFTC/ASD   JD
S/0271/63/000/007/B037/B037

ACCESSION NR: AR3005871

SOURCE: RZh. Avtomatika, telemekhanika i vy*chislitel'naya tekhnika, Abs. 7 B190

AUTHOR: Dement'yev, S. K.; Litvinchuk, V. I.; Polina, T. V.; Tolmacheva, R. F.

TITLE: An experimental investigation of oscillating regions in a magnetic film parametron

CITED SOURCE: Sb. Vy*chisl. sistemy*. Vy*p. 2. Novosibirsk, 1962, 52-57

TOPIC TAGS: parametron, computer component

TRANSLATION: The parametrons investigated here consisted of a circular Permalloy film with a diameter of 1 cm deposited on a glass base layer with dimensions 18 x 18 x 0.1 mm; a one-layer inductive winding (10 turns of 0.09 mm wire) wound on a frame with a cross section of 35 x 1.4 mm; also a capacitor with a capacitance of 2100 micro-microfarads. The parametrons were placed in a cavity between two buses which set up the inductance of the power supply circuit; the circuit was adjusted to resonance by means of the capacitor. The permanent and variable magnetic fields set up by corresponding currents in the power buses were directed along the axis of easy magnetization of the films. In the experiments the parametron film was

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L 19324-63
ACCESSION NR: AR3005871

subjected to the action of a variable field with a frequency of 2f = 4.3 mc, the amplitude of which was modulated by a frequency of 50 cps. The value of the permanent field acting on the film along with the variable field could be changed. A total of 27 films were studied; 24 films with thickness somewhat greater than 1500 A produced parametric oscillations with frequency f. As shown by results from measurements, oscillations existed when there were changes in the amplitude of the variable field of ± 20% as compared with the average value, and when there were changes of ± 45% in the permanent field; a noticeable decrease in parametric oscillating regions occurred with a change of 6% in the power frequency from the resonance frequency corresponding to the maximum oscillating region. There are six illustrations. G. V.

DATE ACQ: 15Aug63   SUB CODE: GE, CP

                                                                    ENCL: 00

Card 2/2

DEMENT'YEV, S.K.; LITVINCHUK, V.I.; POLINA, T.V.; TOLMACHEVA, R.F.

Experimental study of the areas of oscillation in a parametron using a magnetic film. Vych. sist. no.2:52-57 '62.

(MIRA 18:2)

TOMACHEVA, T. A.

Colloid-chemical theory of salt lakes. S. A. SHCHUKAREV AND T. A. TOLMACHEVA. *J. Russ. Phys.-Chem. Soc.* 62, 777-816(1930).—Kurnakov, and after him Krotov (*C. A.* 22, 4424), regard the deposition of salts from seashore lakes as the result of ionic interchange, whereby first SO_4 ions (reaction between $MgSO_4$ and $CaCO_3$) and then Mg ions (reaction between $MgCl_2$ and $CaCO_3$) are removed from the soln. The above view fails to explain the accumulation of sulfates and carbonates in inland lakes, a phenomenon which can be accounted for on the basis of exchange adsorption by the silt colloids. The greater concn. of Na and Mg ions causes them to displace Ca ions from the clay and humus material of colloidal nature. Geological and climatic changes may transform the sea lake into an inland salt deposit; NaCl is subsequently leached out by the rain water, and the adsorption proceeds in the opposite direction, Ca ions being removed from soln. in exchange for Na as Na_2SO_4 and Na_2CO_3. The above theory, as applied to Lake Sakskoye (Crimea), was experimentally tested by studying the adsorbent properties of the lake silt. It was necessary, in order to remove the adsorbed metallic ions, to wash the silt with HCl, although such treatment resulted in the loss of $Fe(HS)_2$ and consequent change in adsorption power. The residue consisted of finely divided clay contg. 2% org. matter. It was suspended in water, and H-electrode titrations were made with $BaCl_2$, $CaCl_2$, $MgCl_2$, NaCl and LiCl solns. For bivalent ions, the adsorption order was Ba > Ca > Mg, for univalent, Na > Li. In solns. more dil. than 0.3 N, the adsorption conformed to Freundlich's isotherm. The adsorption capacity of the silt for H ion appeared to be greater than for Ba ion. The adsorption of Ag ion was followed with the aid of a Ag electrode. Suspensions of the silt were also titrated with NaOH and $Ba(OH)_2$ solns., the buffer action in the latter case being greater. Addn. of neutral salts also increases the buffer action, which thus depends on the adsorption of cations. The changes in the compn. of the water of salt lakes lying near the sea are caused by biochem. reduction of the sulfates and exchange adsorption. The latter process prevails when the sulfates disappear rapidly from soln. (as in the case of lakes which do not communicate with the open sea).

B. SOVENKOFF

METALLURGICAL LITERATURE CLASSIFICATION

TOLMACHEVA, T. A.

Theory of the glass electrode. I. Theoretical. B. P. Nikolskii, J. Phys. Chem. (U. S. S. R.) 10, 495-Nki (1937).—The equation $K = K^\circ + (RT/F) \ln (a_{H^+} + K_{a_{Na^+}})$ where E is e. m. f., a activity and K an exchange const. for H^+ and Na^+ ions, is derived. II. Effect of boric anhydride and aluminum oxide on the electrode properties of glass. B. P. Nikolskii and T. A. Tolmacheva. Ibid. 504-12.—B_2O_3, and still more Al_2O_3, produces deviations from the glass-hydrogen electrode function because of an increase in the difficulty of ion exchange

in the presence of these oxides. Li, K and Ba ions have little effect on glass electrodes, especially if of MacInnes glass. III. Transfer from the hydrogen electrode function into the sodium function. Ibid. 513-23.—For a large variety of glasses, with increasing p_H and in the presence of much Na^+ or Li^+ the glass electrode goes over from the H^+ to the Na^+ (or Li^+) function, and the more rapidly the more strongly the Na^+ and weakly the H^+ are held in the glass.
                                                    F. H. Rathmann

A S B - S L A   METALLURGICAL LITERATURE CLASSIFICATION

TOLMACHEVA, T.A.

[Manual of laboratory experiments in inorganic chemistry]
Rukovodstvo k laboratornym rabotam po neorganicheskoi khimii.
Leningrad, Leningrad. un-t., 1953. 171 p.   (MLRA 7:11D)

TOLMACHEVA, T.A.

SHCHUKAREV, S.A.; TOLMACHEVA, T.A.; ORANSKAYA, M.A.

Thermal stability of cobalt and nickel halides.   Zhur.ob.khin.24
no.12:2093-2109 D '54.
                                                     (MLRA 8:3)

1. Leningradskiy gosudarstvennyy universitet.
       (Halides)

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
        Physicochemical analysis. Phase transitions   B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

Author   : 1. Shukarev S.A., Tolmacheva T.A., Oranskaya M.A., Komandorskaya L.V.
            2. Shchukarec S.A., Oranskaya M.A., Shemyakina T.C.

Title   : Thermal Dissociation of Platinum Halides. Communication 1. Platinum
            Bromides. Communication 2. Platinum Chlorides.

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 1, 8-16; 17-23

Abstract : 1. Statistical method of F. Ephraim (Ber., 1917, 50) 1069.) was used to investi-
            gate temperature dependence of thermal dissociation of $PtBr_4$ (I), $PtBr_3$
            (II), $PtBr_2$ (III) and $PtBr$ (IV). Scheme of the unit is described.
            Data obtained are represented as $\lg P - 1/T$ graphs. From the slope of the
            straight lines were determined equations of dependence of dissociation pre-
            ssure on temperature, for I $\lg P - 7.809 - (4549/T0$, II $\lg P - 7.195 -$
            $(4808/T)$, III, $\lg P = 6.064 - (5123/T)$ and IV $\lg P = 4.755 - (4679/T)$.
            Calculated therefrom were the values of P_{Br2}, at $10°$ intervals, for I
            (over range 200-280°), II (280-390°), III (420-500° and IV (460-510°) which
            are tabulated. By using these data calculations were made of the values of

Card 1/3

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
      Physicochemical analysis. Phase transitions   B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

enthalpy and entropy changes ($\triangle H$ and $\triangle S$) in reactions of successive dis-
sociation of the bromides, on the assumption that these quantities are inde-
pendent of the temperature within the interval under study. Determined were
the values of enthalpy of formation $\triangle H$ (formation), (in kcal/mole) from
metal and gaseous bromine, for I, II, III and IV, which are, respectively,
-44.0; -33.6; -22.6; -10.75, and thus in good agreement with literature data.
The actual existence of each bromide was confirmed by chemical analysis and
recording of Debye X-ray patterns. It is shown that below 340°K IV must
undergo exothermal disproportionation. The appreciable scattering of expe-
rimental data forces the authors to assume that platinum bromides possess
the property of interacting with one another to form solid solutions.
2. Investigated was the temperature dependence of dissociation pressure
of PtCl$_4$ (V) (298-358°), PtCl$_3$ (VI) (332-394°), PtCl$_2$ (VII) (490-530°),
and PtCl (VIII) (568-762°). On the basis of the data thus obtained the
enthalpies of formation were calculated (kcal/mole): V -62.7; VI -48.1;
VII -33.4; VIII -11.7; these values are in satisfactory agreement with
literature data. Debye X-ray patterns of the platinum chlorides have

Card 2/3

USSR/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
       Physicochemical analysis. Phase transitions   B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11143

demonstrated the actual existence of each substance. Experimental data for
the reactions $2PtCl_n = 2PtCl_{n-1} + Cl_2$ are expressed by the equations
$lg P_{Cl_2} = A - (B/T)$, wherein A and B are: for n =4, 9.04, 6267.5; n = 3, 8.
42, 6303.1; n = 2, 10.59, 9131.1; n = 1, 4.36, 5114.9. On the basis of the
data obtained and those found on the literature an analysis is made of the
dependence of isobaric potential of the valency is discussed. It is shown
that at low temperatures (< 600°) VIII must undergo exothermal dispropor-
tionation.

Card 3/3

SHCHUKAREV, S.A.; ORANSKAYA, M.A.; TOLMACHEVA, T.A.; YAKHKIND, A.K.

Saturated vapor pressure of vanadium tetrachloride. Zhur.neorg.khim.1 no.1:30-35 '56.

(Vanadium chlorides)

(MLRA 9:10)

TOLMACHEVA T.A

TOLMACHEVA, T.A.; ANDRINOVSKAYA, T.L.

Vapor pressure of cadmium iodide and cadmium bromide. Vest.
LGU 15 no.10:131-136 '60.   (MIRA 13:5)
    (Cadmium iodide) (Cadmium bromide) (Vapor pressure)

SHCHUKAREV, S.A.; ORANSKAYA, M.A.; TOLMACHEVA, T.A.; IL'INSKIY, Yu.S.

Thermal dissociation of vanadium dichloride.   Zhur.neorg.khim.
5 no.1:9 11 Ja '60.   (MIRA 13:5)
              (Vanadium chloride)

TOLMACHEVA, T. A.

/USSR/Physical Chemistry. Thermodynamics, Thermochemistry,   B-8
          Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14645

Author   : S. A. Shchukarev, M. A. Oranskaya, T. A. Tolmacheva,
           A. K. Yakhkind
Inst   : —
Title   : Pressure of Saturated Vapor of Vanadium Tetrachloride

Orig Pub: Zh. neorgan. khimii, 1956, 1, No 1, 30-35

Abstract: The purpose of the work is to check the previously ob-
          tained data (Simons J. H., Powell M. G., J. Amer. Chem.
          Soc., 1945, 67, 75) and to enlarge the temperature range
          somewhat. VCl_4 was prepared by chlorinating alumino-
          thermic V. A scheme of the chlorination installation is
          attached, the method of work is described. The pressure
          of the saturated vapor P_{VCl_4} was determined by the flow
          method permitting to compute the partial pressures of VCl_4
          and Cl_2 separately. Dried and purified N_2 was used as a
          gas inert in reference to VCl_4. P_{VCl_4} was determined in

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USSR/Physical Chemistry. Thermodynamics, Thermochemistry   B-8
     Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14645

Abstract: the range from $0°$ to $90°$. The following was found based
on the experimental data: $\log P_{VCl_4}(mm) = -(2174 / T) +$
5.19; $L = 9.9 \pm 0.1$ kcal per mole; ΔS (vap.) $= 23.8$ entr.
units. The checking of the data by the method of measur-
ing the vapor pressure by boiling points within the range
from 25 to $85°$ resulted in following values: $\log P_{VCl_4} =$
$= -(2185 / T) + 5.21$; $L = 10.0 \pm 0/1$ kcal per mole, ΔS
(vap.) $= 23.8 \pm 0.4$ entr. units. It follows from the
concordance of the results of both these methods that VCl_4
in vapor form is a monomer.

Card 2/2

S/054/60/000/02/16/021
B022/B007

AUTHORS: Tolmacheva, T. A., Andrinovskaya, T. L.

TITLE: The Vapor Pressure of Cadmium Iodide and Cadmium Bromide

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 2, pp. 131-136

TEXT: In connection with the investigation of the thermodynamics of the halides of elements of the auxiliary subgroups, a number of investigations is being carried out for the purpose of determining the pressure of the thermal dissociation and the vapor pressure of these compounds at the kafedra neorganicheskoy khimii Leningradskogo universiteta (Chair of Inorganic Chemistry of Leningrad University). The present paper deals with the investigation of the vapor pressure of cadmium iodide and -bromide. An analytical method for the quantitative determination of I_2 and I^- with both iodides being present is worked out. The vapor pressure of CdI_2 was measured at 454, 492, 530, 564, 600, and 652°C. The results obtained are given in Table 1, and the dependence of the logarithm of cadmium iodide-

Card 1/2

The Vapor Pressure of Cadmium Iodide and
Cadmium Bromide

S/054/60/000/02/16/021
B022/B007

and cadmiumbromide vapor pressure on the reciprocal temperature value
is given in Fig. 1. The mean values ΔH and ΔS were calculated with
reference to the mean temperatures of each interval (Table 2). The vapor
pressure of $CdBr_2$ at 462, 537, 570, 600, and 624°C was calculated
(Table 3), and the logarithms of the vapor pressure of various halides
of cadmium at 600°C were given (Fig. 2). In all cases the gas current
method was used. It was found that within the temperature range investi-
gated, the thermal dissociation of both CdI_2 and $CdBr_2$ is insignificant.
From the values found for vapor pressure, the mean values of the enthalpy
and entropy of the evaporation and the sublimation of $CdBr_2$ within the
temperature ranges investigated, and finally the melting point of $CdBr_2$
were calculated. There are 2 figures, 3 tables, and 12 references, 4 of
which are Soviet.

Card 2/2

5 (2), 5 (4)

AUTHORS:

Shchukarev, S. A., Oranskaya, M. A., Tolmacheva, T. A., Il'inskiy, Yu. S.

SOV/78-5-1-2/45

TITLE: Thermal Dissociation of Vanadium Dichloride

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 1, pp 8 - 11 (USSR)

ABSTRACT: Publications give different data for the formation enthalpy ΔH of VCl_2. The authors report on their indirect determination of ΔH by investigation of the equilibrium of VCl_2 reduction by means of H at 750°, 775°, 800°, and 825°. The method is described in references 9,10. The experiments lasted for 100-200 hours. Table 1 shows the values of the dissociation pressure of VCl_2. Figure 1 shows the linear dependence of lg P_{Cl_2} on $\frac{1}{T}$. The computed values of the formation enthalpy ΔH and of the absolute entropy ΔS are shown in table 2. The value found for ΔH is in good agreement with that assumed by the U.S.A. Bureau of Standards. Figure 2 and table 3 show the opposite behavior of

Card 1/2

Thermal Dissociation of Vanadium Dichloride

SOV/78-5-1-2/45

the dissociation enthalpy on the one hand and of the sum of the two ionization potentials and the sublimation energy on the other hand in the case of elements with the atomic numbers 21 - 30. There are 2 figures, 3 tables, and 18 references, 9 of which are Soviet.

SUBMITTED: October 27, 1958

Card 2/2

SHCHUKOREV, S.A.; ORANSKAYA, M.A.; TOLMACHEVA, T.A.; VANICHEVA, L.L.

Thermal dissociation of gold bromides. Zhur. neorg. khim. 3
no.7:1478-1482 Jl '58.
(Gold bromides)   (MIRA 11:9)

AUTHORS: Shchukarev, S.A., Oranskaya, M.A., Tolmacheva, T.A., Vanicheva, L.L. $SOV/$ 78-3-7-2/44

TITLE: The Thermal Dissociation of Gold Bromide (Termicheskaya dissotsiatsiya bromidov zolota)

ABSTRACT: In the course of the present work the dissociation of $AuBr_3$ in the temperature interval 350-450°K was investigated according to two static methods: with the isoteniscope and with the isoteniscope with glass membranes. Gold bromide is produced by the action of bromine upon pulverized gold. In connection with this dissociation it was found that disintegration develops with the forming of AuBr and the oxidation of monobromide. For the dissociation of $AuBr_3$ it holds that: $\lg P_{Br_2} = 8.99 - \frac{4052}{T}$ (360-450°K) and for the '   ociation of AuBr it holds that:

$\lg P_{Br_2} = \cdot \quad - \frac{3532}{T}$ (360-450°K). On the strength of the results obtained the enthalpy and enthropy of the formation of AuBr and

Card 1/2

The Thermal Dissociation of Gold Bromide

SOV/78-3-7-2/44

AuBr$_3$ were calculated for the interval of 350-450°K. The temperature dependence of the energy liberated during the formation of gold halides is given. Radiograms of gold, AuBr and AuBr$_3$ were taken. During the dissociation of gold monobromide the lines of gold and not disintegrated AuBr$_3$ were detected in the samples. It was confirmed by Debyegrams that AuBr is dissociated at low temperatures. It was shown that at temperatures below 325°K AuBr is disproportionated to AuBr$_3$ and Au, and that at room temperatures it exists only in a metastable state. There are 2 figures, 5 tables, and 10 references, 4 of which are Soviet.

SUBMITTED: June 1, 1957

1. Gold bromide--Decomposition   2. Gold bromide--T.   ure factors
3. Gold bromide--Preparation   4. Radiography--Appl

Card 2/2

SHCHUKAREV, S.A.; TOLMACHEVA, T.A.; PAZUKHINA, Yu.L.

Dissociation pressure of palladium iodide. Zhur. neorg. khim.
9 no.11:2507-2510 N '64
(MIRA 18:1)

1. Leningradskiy gosudarstvennyy universitet, Kafedra ne-
organicheskoy khimii.

SHCHUKAREV, S.A.; TOLMACHEVA, T.A.; SLAVUTSKAYA, G.M.

Thermal dissociation of platinum iodides. Zhur. neorg. khim.
9 no.11:2501-2506 N '64
(MIRA 18:1)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova,
Kafedra neorganicheskoy khimii.

SHCHUKAREV, Sergey Aleksandrovich; TOLMACHEVA, T.A., otv. red.;
PIASTRO, V.D., red.

[Lectures in general chemistry] Lektsii po obshchemu kursu
khimii. Leningrad, Izd-vo Leningr. univ. Vol.2. 1964. 440 p.
(MIRA 17:8)

1. Kafedra neorganicheskoy khimii Leningradskogo gosudarstven-
nogo universiteta (for Tolmacheva).

TOLMACHEVA, T.A.; TSINTSIUS, V.M.; ANDRIANOVA, L.V.

Vanadium trioidide. Zhur.neorg.khim. 8 no.3:553-559 Mr '63.

(Vanadium iodides)   (MIRA 16:4)

SHCHUKAREV, S.A.; TOLMACHEVA, T.A.; TSINTSIUS, V.M.

Dismutation of vanadium tribromide at high temperatures. Zhur.neorg.khim.
7 no.7:1505-1508 Jl '62.

(Vanadium bromide)   (MIRA 16:3)

S/078/63/008/003/001/020
B117/B186

AUTHORS: Tolmacheva, T. A., Tsintsius, V. M., Andrianova, L. V.

TITLE: Study of vanadium triiodide

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 3, 1963, 553-559

TEXT: The formation enthalpy of vanadium triiodide was studied by the
solubility method in a calorimeter at 25°C using 0.4 N alkali solution
with 0.010 N hydrogen peroxide. An average of $\Delta H = -143.0 \pm 1.0$ kcal/mole
was found for the system $VI_3 + 4KOH + 2H_2O_2$. The enthalpy of the system
$1/2 \ V_2O_5 + 3KI + KOH + H_2O_2$ was also determined. Its mean value was
-7.7 ± 0.1 kcal/g-atom vanadium. The values found for the solubility
were used to calculate the formation enthalpy of solid vanadium triiodide.
It was -67 ± 2 kcal/mole for formation from metallic vanadium and solid
iodine, and -89 ± 2 kcal/mole for formation from metal and gaseous iodine.
The entropy of formation of vanadium triiodide from metal and gaseous
iodine was calculated: $\Delta S = -48.5 \pm 3$ entropy units. Further, the
dissociation of vanadium triiodide to solid diiodide and gaseous iodine

Card 1/2

Study of vanadium triiodide

S/078/63/000/003/001/020
B117/B186

was studied between 300 and 530°C. $\Delta H = 22\pm1$ kcal/mole and $\Delta S = 27\pm1$ entropy units were determined from three series of tests for the reaction $2VI_3 = 2VI_2 + I_2$. Experiments using different-sized portions of triiodide afforded consistent values for the dissociation pressure. This suggests that vanadium trioxide and dioxide do not possess an appreciable range of homogeneity. The formation enthalpy and entropy of solid diiodide were calculated from the thermodynamic values found for triiodide: $\Delta H = -79\pm3$ kcal/mole for the formation of VI_2 from gaseous iodine and metal, and $\Delta H = -63\pm3$ kcal/mole for the formation from solid iodine and metal. The entropy found, $\Delta S = -35\pm2$ entropy units, agreed with published data. There are 2 figures and 6 tables.

SUBMITTED: August 13, 1962

Card 2/2

SHCHUKAREV, Sergey Aleksandrovich; TOLMACHEVA, T.A., otv.red.;
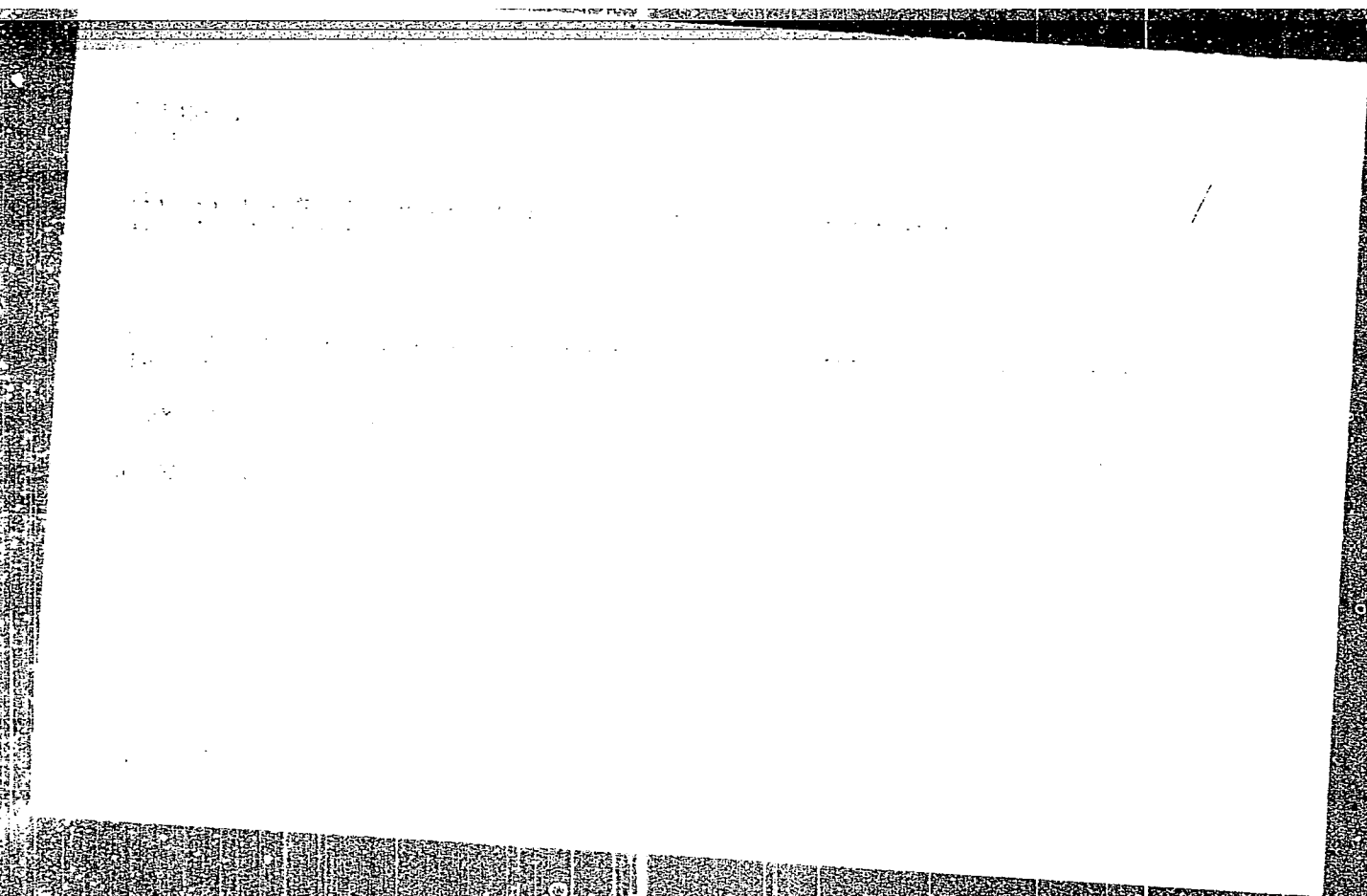PIANTRO, V.D., red.; ZHUKOVA, Ye.G., tekhn.red.

[Lectures on the general chemistry course] Lektsii po obshchemu
kursu khimii. Leningrad, Izd-vo Leningr.univ. Vol.1. 1962.
405 p.

(Chemistry—Study and teaching)   (MIRA 15:5)

carbon tetrachloride at room temp.) for 2.5 to 3 hours. The CCl4-Cl2 mixtures (chlorine saturated with
CCl4+Cl2 mixture was also

NOVIKOV, G.I.; TOLMACHEVA, V.D.

Pressure and composition of saturated vapor in the
NaCl - LaCl$_3$ system. Zhur.neorg.khim. 10 no.12:2712-2716
D '65.
(MIRA 19:1)

TOLMACHEVA, V.K.

Waterproof wall material made with a gypsum-cement binder containing a waterproof additive. Izv. Kazan. fil. AN SSSR. Ser. geol. nauk no. 7:451-454 '59.

       (Building materials)   (Waterproofing) (MIRA 14:4)

TOLMACHEVA, Ye.A. [Talmachova, E.A.]

Morphological and anatomic changes in the structure of plants in-
jured by rust fungi. Vestsi AN BSSR.Ser.biial.nav. no.2:50-55 '62.

(RUSTS (FUNGI))   (MIRA 15:8)

TOLMACHEVA, Ye.A.

A technique for making kumiss from cow's milk. Vop.pit. 15 no.4:
45-47 Jl-Ag '56.

(MIRA 9:9)

1. Iz kumysnoy laboratorii (zav. Ye.A.Tolmacheva) 3-go Ukrainskogo
sanatoriya VTSSPS.
        (MILK
            koumiss prep. from cow's milk, method)

TOLMACHEVA, Ye.A.

Histopathological symptoms in diseases caused by the fungus Puccinia
symphytibromorum F. Mull. Vestsi AN BSSR Ser. biial., nav. no.1:112-
114 '62.

(MIRA 17:9)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T.

Exchange of sulfate ions for a mixture of chloride and iodide
ions on an H-O anion exchanger under dynamic conditions. Zhur.-
fiz.khim. 36 no.5:929-932 My '62.
(MIRA 15:8)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Ion.exchange) (Sulfates) (Halides)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T.

Univalent ion exchange on an H — O anion exchanger occurring
under dynamic conditions as dependent on the grain size of
the anion exchanger. Zhur. fiz. khim. 36 no.1:148-152 Ja '62.
(MIRA 16:8)
1. Khar'kovskiy gosudarstvennyy universitet im. Gor'kogo,
Nauchno-issledovatel'skiy institut khimii.
(Ion exchange)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T. (Khar'kov)

Dynamics of anion exchange on the anion exchanger EDE-10 = as
dependent on the flow rate under conditions of concave sorption
isotherm. Zhur. fiz. khim. 36 no.11:2347-2351 N'62.

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.

(MIRA 17:5)

TOLMACHEVA, Yu.A.

Comparative study of sodium and hydrogen ion exchange by calcium, zinc, cadmium, lead, and copper ions using KU-2 SBS-1 and KB-4p-2 cation exchangers. Izv. vys. ucheb. zav.; khim. i khim. tekh. 8 no.1:55-59 '65.

(MIRA 18:6)

1. Khar'kovskiy gosudarstvennyy universitet imeni Gor'kogo, kafedra obshchey khimii.

TOLMACHEVA, Yu. A.; DAVYDOV, A. T.

Exchange of monovalent ions on the EDE-10P anion exchanger
under dynamic conditions depending on the rate of solution
flow and size of the anion exchanger grain. Zhur. fiz. khim.
36 no.12:2653-2658 D '62.
(MIRA 16:1)

1. Nauchno-issledovatel'skiy institut khimii i Khar'kovskiy
gosudarstvennyy universitet imeni A. M. Gor'kogo.

(Ion exchange)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T.

Study of the exchange dynamics of univalent anions on the
EDE-10P anion exchanger based on the rate of solution
flow. Izv.vys.uch.zav.; khim.i khim.tekh. 5 no.4:579-584
'62.

(MIRA 15:12)

1. Khar'kovskiy gosudarstvennyy universitet imeni
A.M. Gor'kogo, kafedra obshchey khimii.
                    (Ion exchange)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T. (Kharkov)

Exchange of sulfate ions for chloride and iodide ions
on exchanger N-0 under flow conditions. Zhur.fiz.khim.
34 no.6:1260-1264 Je '60.
                                              (MIRA 13:7)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.
Gor'kogo, Institut khimii.
          (Ion exchange)

TOLMACHEVA, Yevgeniya Anisimovna; VAYNTSVAYG, G.Ye., red.; POGOSKINA,
M.V., tekhn.red.

[Kumiss] Kumys. Moskva, Gos.izd-vo med.lit-ry Medgiz, 1960.
21 p.

(KUMISS)   (MIRA 14:3)

TOLMACHEVA, Yu.A.; DAVYDOV, A.T.

Study of univalent ion exchange on an H - O anion exchanger under dynamic conditions at various flow rates. Zhur.fiz.khim. 35 no.9: 2052-2059 '61.

(MIRA 14:10)

1. Nauchno-issledovatel'skiy institut khimii Khar'kovskogo gosudarstvennogo universiteta imeni A.M. Gor'kogo.

(Ion exchange)

5(4)

AUTHORS: Davydov, A. T., Tolmacheva, Yu. A.   SOV/76-33-4-17/32

TITLE: Investigation of the Dynamics of Ion Exchange on Sulfo-
               carbon (Issledovaniye dinamiki ionnogo obmena na sul'fougle)

ABSTRACT: The exchange of hydrogen ions with potassium ions under static
               and dynamic conditions was investigated in sulphonated carbon
               (SC). The experimental results obtained were explained from
               the viewpoint of the dynamic theory of ion exchange of mono-
               valent ions by O. M. Todes and V. V. Rachinskiy (Refs 8-11).
               The (SC) applied exhibited a dispersity of 0.25 - 0.50 mm in
               air-dry state and was saturated with hydrogen ions. The method
               of determining the capacity of the sorbent is described. The
               exchange constant (EC) was computed according to an equation
               (2) (Table 1) and its mean value is $\overline{K} = 0.85$. 7 different
               chromatogram columns with different layers of the sorbent were
               used for the investigations under dynamic conditions, a 0.01 n
               KCl-solution was let through and the velocity of motion of
               the stationary front was determined (Table 2). Its mean value
               was 0.068 cm/min. By means of the equations derived by O. M.

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SOV/76-33-4-17/32

Investigation of the Dynamics of Ion Exchange on Sulfocarbon

Todes and V. V. Rachinskiy the filtration cross section within the sorbent was computed (Table 3) as well as the dynamic coefficient, the coefficient of sorption velocity and the curve of the yield (in the concentration range $0.1 \leqslant \varphi \leqslant 0.9$) (Fig 1). The rules observed experimentally could be satisfactorily reproduced by the above-mentioned equations. In conclusion the authors thank V. V. Rachinskiy. There are 2 figures, 3 tables, and 13 Soviet references.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: September 25, 1957

Card 2/2

TOLMACHEVA, Yu.M., prof., doktor khim.nauk, red.

[Radiochemical analysis of fission products; collected articles]
Radiokhimicheskii analiz produktov deleniia; sbornik statei.
Moskva, 1960. 134 p.   (MIRA 13:7)

1. Akademiya nauk SSSR. Radiyevyy institut.
        (Radiochemistry)   (Fission products)

TOLMACHEVA, Z.I., kand.tekhn.nauk

      Interpretation possibilities of oblique aerial photographs. Izv.
    vys.ucheb.zav.; geod.i aerof. no.6:113-116 '61.   (MIRA 15:3)
              (Photographic interpretation)

S/659/62/008/000/014/028
I048/I248

AUTHORS: Yeremenko, V.N., Tolmacheva, Z.I., and Velikanova, T.Ya.

TITLE: On the structure of titanium carbide alloys with nickel, chromium, and molybdenum

SOURCE: Akademiya nauk SSSR.. Institut metallurgii, Issledovaniya po zharoprochnym splavam. v.8. 1962. 95-102

TEXT: The systems Ti-C-Ni, Ti-C-Cr, and Ti-C-Mo were studied in an attempt to determine the true phase composition of cermets containing TiC with Ni, Cr, or Mo. The solubility of Ni in TiC at 1000-1280°C is 0.7% by wt.; TiC-Ni alloys containing over 0.7% Ni are composed of two phases, the microhardness of one of the phases being 3000 kg./sq.cm. The section TiC-Ni through the Ti-C-Ni system; as well as the TiC-Cr and TiC-Mo sections through the respective ternary systems, are quasibinary; the melting of alloys containing over 5% Ni starts at 1280-1300°C. In the system Ti-C-Cr, the formation of a new phase, $Cr_{23}C_6$, is observed when small amounts of TiC are added to Cr; the TiC-Cr alloy containing 20% Cr is composed of

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S/659/62/008/000/014/028
I048/I248

On the structure of titanium...

three phases whose microhardness (300, 1000, and 3000 kg.sq.cm.) corresponds to that of solid solutions based on Cr, chromium carbide, and TiC respectively. TiC-Cr alloys containing 52.85 and 63.0% Cr are composed of two phases - Cr-based and TiC-based solid solutions. All alloys in the system Ti-C-Mo are composed of two phases, with microhardnesses of 300 and 2400 kg./sq.cm.; x-ray data reveals that these are Mo-based and TiC-based solid solutions. The experimental data for this system disagrees with the data of Albert and Norton (Planseeberichte fur Pulvermetallurgie, 4, 2, 1956), according to which a Mo_2C-based solid solution exists in the system. There are 7 figures and 1 table.

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S/137/62/000/001/122/237
A052/A101

AUTHORS: Yeremenko, V.N., Tolmacheva, Z.I.

TITLE: On the triangulation of the system titanium-carbon-chromium

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 6, abstract 1I42
             (Poroshk. metallurgiya, no. 2, 1961, 30 - 34, English summary)

TEXT: For determining the triangulation of the system Ti-C-Cr, alloys of
Ti with Cr_3C_2 and Cr_7C_3 and of TiC with Cr were studied. The investigation was
carried out by the method of metallographic analysis. It is shown that the
TiC-Cr section in the Ti-C-Cr system is a quasibinary one. There are 8 refer-
ences. See also RZhMet, 1961, 11Zh152.

                                                    Z. Rogachevskaya

[Abstracter's note: Complete translation]

Card 1/1

32616

S/137/61/000/011/072/123
A060/A101

18.1285

AUTHORS: Yeremenko, V.N., Tolmacheva, Z.I.

TITLE: On triangulating the system titanium-carbon-nickel

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 25, abstract
              11Zh152 ("Poroshk. metallurgiya", 1961, no. 2, 21-29, English
              summary)

TEXT: To determine the triangulation of the system Ti-C-Ni, alloys were
investigated whose compositions lie upon the intersection of the sections TiC-Ni
and Ti_2-Ni-C, TiNi-C, $TiNi_3$-C. The solubility of Ni in TiC in the solid state
was determined. The alloys with composition Ti_2Ni, TiNi, and $TiNi_3$ were prelimi-
narily smelted in an arc furnace, and then were alloyed with graphite of high
purity. The investigation was carried out by the methods of metallographic and
X-ray analyses. It was demonstrated that the system Ti-C-Ni is quasi-binary, and
a diagram was constructed for the system TiC-Ni. The Ni solubility in TiC in the
solid state constitutes 0.7-0.8% and does not vary with the temperature in the in-
terval 1,000-1,280°C. There are 9 references.   Z. Rogachevskaya
[Abstracter's note: Complete translation]

Card 1/1

TOLMACHEVA, Z.I.

Reflection on topographic maps of seasonal fluctuations of lakes of arid regions. Top.geog. no.34:125-130 '54.   (MLRA 7:12)
(Lakes) (Topographical drawing--Conventional signs)

S/081/62/000/008/009/057
B166/B101

AUTHORS: Yeremenko, V. N., Tolmacheva, Z. I.

TITLE: The triangulation of the system titanium - carbon - nickel

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 46, abstract
              8B320 (Poroshk. metallurgiya, no. 2, 1961, 21-29)

TEXT: The diagram of the quasibinary system TiC - Ni is constructed on
the basis of published data as well as the data from the present investi-
gation. On the basis of metallographic and x-ray diffraction studies it is
shown that the solubility of Ni and TiC does not vary with temperature
and amounts to 0.7-0.8 % Ni by weight. [Abstracter's note: Complete
translation.]

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36438
S/137/62/000/003/074/191
A006/A101

/5.2240

AUTHORS: Yeremenko, V.N., Tolmacheva, Z.I.

TITLE: Solubility of chromium and chromium carbides in titanium carbide
                in solid state

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 44, abstract 3G309
                ("Poroshk. metallurgiya", 1961, no. 4, 31 - 36, English summary)

TEXT: The authors analyzed the possibility of dissolving Cr and Cr car-
bides in Ti carbide, based on notions of deficiencies in the TiC lattice. Alloys
TiC-Cr, TiC-Cr$_3$C$_2$, TiC-Cr$_{23}$C$_6$, TiC-Cr$_7$C$_3$ were prepared by methods of hot pressing
and sintering of the pressed blanks, with subsequent homogenizing annealing. A
metallographical analysis of the alloys obtained has shown that at up to 6 - 6.5
weight percent Cr, all the alloys are single-phase ones, i.e., solubility of Cr
and Cr carbide in TiC on conversion to the Cr content is equal and does not
depend on the temperature in the investigated range. It is shown that at temper-
atures up to about 0.5 T$_{melting}$ of a refractory component, the solubility of metal
in metallic compounds changes insignificantly in the majority of cases.
[Abstracter's note: Complete translation]   R. Andriyevskiy
Card 1/1